

Safety Data Sheet

Liquid Magnesium Sulphate Foliar Fertiliser



According to EC-Regulations 1907/2006 (REACH) & 1272/2008 (CLP)

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product/Trade name : Magnesium 9% MgO weight/volume
Synonyms : Magnesium 9% MgO weight/volume
EC No : not applicable as fertiliser is a mixture
CAS No. : not applicable as fertiliser is a mixture
REACH Registration Number. : not applicable as fertiliser is a mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Fertilizer
Uses advised against : This mixture should be limited to use as a fertiliser.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Importer/Supplier : BrineFlow Properties and Handling Ltd
Address : South Denes Road, Great Yarmouth, Norfolk. NR30 3QD
Telephone number : 01493 809820

1.4 Emergency telephone number

Telephone number : 01493 809820

2 Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation 1272/2008 (CLP) : Not regarded as hazardous to health under current classification
Hazard Statement(s) : n/a
Classification in accordance with Directive 67/548 (DSD) : n/a
Risk phrase(s) : n/a

2.2 Label elements

no labelling requirement

2.3 Other hazards

Not a PBT or vPvB mixture based on ingredients.

3 Composition/information on ingredients

3.1 substance

ingredients

Chemical name	CAS no.	EC no.	Generic REACH Registration No.	Classification Regulation (EC) No. 1272/2008 Directive 67/548 (DSD)	% (w/w)
Magnesium Sulphate Heptahydrate (Epsom Salts)	10034-99-8	231-298-2	N/A	none	30-40%
Polyoxyethylene Sterate	9004-99-3		N/A	none	<0.5%
Dimethyl polysiloxane	9016-00-6				
Sorbitan Monosterate	1338-41-6	215-664-9			
Water	7732-18-5	231-791-2	N/A	none	Upto 70%

EC no. means EINECS or ELINCS number.

4 First aid measures

4.1 Description of first aid measures

- Eye contact : Rinse eyes with water as a precaution.
Inhalation : Remove person to fresh air and keep comfortable for breathing
Ingestion : Call a poisons center or a doctor if you fell unwell
Skin contact : Wash skin with plenty of water

4.2 Most important symptoms and effects, both acute and delayed

No additional information available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

5 Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Product not flammable - use fire extinguishing media for surrounding materials.
unsuitable extinguishing media : No information available

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture : When heated and in case of fire, irritating vapours/gases may be formed. In case of fire, toxic gases may be formed.

5.3 Advice for firefighters

- Special fire fighting procedures : Keep run-off water out of sewers and water sources. Dike for water control.
Special protective equipment for fire-fighters : Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Keep unauthorised personnel away.
Do not walk through spilled material.
Avoid exposure to vapours or sprays.
Wear appropriate personal protective equipment.

6.2 Environmental precautions

Prevent the contamination of watercourses and drains and sewage systems and inform the appropriate authority in case of accidental contamination of watercourses.

6.3 Methods and material for containment and cleaning up

Any spillage of fertilizer should be cleaned up promptly, swept up and placed in a clean labelled open container for safe disposal.

Stop flow of material if possible.

Absorb spillage with suitable absorbant material.

6.4 Reference to other sections

See section 1 for emergency contact information, section 8 for personal protective equipment and section 13 for waste disposal.

7 Handling and storage

7.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours or sprays and contact with skin and eyes.

Carefully clean all equipment prior to maintenance and repair.

When handling the product use appropriate personal protective equipment (see section 11).

Carefully clean all equipment prior to maintenance and repair.

7.2 Conditions for safe storage, including any incompatibilities

Locate away from the sources of heat or fire.

On farm, ensure that the fertilizer is not stored near water courses.

Ensure high standard of housekeeping in the storage area.

Any container used for the storage should be sound and kept sealed.

Packaging materials: Plastic synthetic materials. Keep packaging sealed.

7.3 Specific end use(s)

Fertilizer

8 Exposure controls/personal protection

8.1 Control parameters

No additional information available

8.2 Exposure controls

Appropriate engineering measures : Ventilate as needed to control vapour and spray.

Hygienic measures : When handling the product do not eat, drink or smoke.

: Wash hands after handling and before eating, smoking, using the lavatory and end of working period

: Remove and isolate contaminated clothing. Launder contaminated clothing before reuse.

Individual protection

Respiratory system : use respiratory mask if vapour or spray present.

Skin and body : Working clothes.

Hands : Wear suitable gloves when handling the product if risk of skin contact.

Eyes : Use vapour / spray safety goggles where there is danger of eye contact. (EN166)

Environmental exposure controls : Inform the appropriate authority in case of accidental contamination of watercourses.

: Do not flush into surface water or sanitary sewer system.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance :	Clear green liquid
Odour :	Slight
Odour threshold :	n/a
pH :	typically > 7
Melting point/freezing point :	-5 ^o C
Initial boiling point and boiling range :	>100 ^o C
Flash point :	n/a
Flammability (solid, gas) :	Non-combustible. Decomposes on heating. Toxic gases are generated.
Upper/lower flammability or explosive limits :	Not available
Explosive properties :	n/a
Auto-ignition temperature :	n/a
Decomposition temperature :	>100 ^o C
Minimum ignition energy :	Not available
Critical temperature :	n/a
Density :	Typically 1.32 - 1.36 kg/litre
Vapour pressure at 20°C :	Not available
Vapour density :	Not available
Partition coefficient :	Not available
Viscosity :	Not available
Water solubility :	highly soluble
Surface tension :	Not available

10 Stability and reactivity

10.1 Information on basic physical and chemical properties

Stable under recommended storage and handling conditions (see section 7, handling and storage).

10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7, handling and storage).

10.3 Possibility of hazardous reactions

none known

10.4 Conditions to avoid

Avoid thermal decomposition

10.5 Incompatible materials

No additional information available

10.6 Hazardous decomposition products

For fire situation: see section 5.

When strongly heated, it evaporates and concentrates and may decompose releasing toxic fumes.

See also Sections 2 and 9.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Type	Species	result
Magnesium Sulphate Heptahydrate (10034-99-8)	Oral LD50	Rat	>2000 mg/kg
	Dermal LD50	Rat	>2000 mg/kg

11 Toxicological information cont...

Local effects

- Skin irritation : Not Classified (Based on available data, classification criteria not met)
- Eye irritation : Not Classified (Based on available data, classification criteria not met)
- Sensitisation : Not Classified (Based on available data, classification criteria not met)
- Mutagenicity : Not Classified (Based on available data, classification criteria not met)
- Reproductive toxicity : Not Classified (Based on available data, classification criteria not met)
- Carcinogenicity : Not Classified (Based on available data, classification criteria not met)

12 Ecological information

12.1 Information on toxicological effects

Not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment

Aquatic	Type	Species	result
Magnesium Sulphate Heptahydrate (10034-99-8)	LC50	Fish	680mg/l
	LC50	Daphnia	720mg/l

12.2 Persistence and degradability

- Degradability : Not applicable.
- Phototransformation : Not applicable.
- Biodegradation : Not applicable.
- Hydrolysis : not applicable

12.3 Bioaccumulative potential

Log Pow : not applicable

12.4 Mobility in soil

not applicable

12.5 Results of PBT and vPvB assessment

Not a PBT or vPvB mixture based on ingredients.

12.6 Other adverse effects

none known

13 Disposal considerations

13.1 Waste Treatment Methods

- Container : Containers should be cleaned by appropriate method and then re-used or disposed by landfill or incineration as appropriate, in accordance with local and national regulations.
 - : Do not remove label until container is thoroughly cleaned.
- Methods of disposal : Depending on degree and nature of contamination dispose of by use as fertilizer on farm, as raw material for liquid fertilizer, or to an authorised waste facility.
 - : Do not empty into drains; dispose of this material and its container in a safe way and in accordance with all applicable local and national regulations.

14 Disposal considerations

14.1 Un Number

- ADR/RID : Not Applicable
- ADN/ADNR : Not Applicable
- IMDG : Not Applicable
- ICAO/IATA : Not Applicable

14.2 UN Proper shipping name

ADR/RID : Not Applicable
ADN/ADNR : Not Applicable
IMDG : Not Applicable
ICAO/IATA : Not Applicable

14.3 Transport hazard class(es)

ADR/RID : Not Applicable
ADN/ADNR : Not Applicable
IMDG : Not Applicable
ICAO/IATA : Not Applicable

14.4 Packing group and label

ADR/RID : Not Applicable
ADN/ADNR : Not Applicable
IMDG : Not Applicable
ICAO/IATA : Not Applicable

14.5 Environmental hazards

ADR/RID : Not Applicable
ADN/ADNR : Not Applicable
IMDG : Not Applicable
ICAO/IATA : Not Applicable

14.6 Special Precautions for user

see section 8

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

15 Regulatory information

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture

This product is classified and labelled in accordance with Regulation (EC) 1272/2008 - CLP Regulation.
This Safety Data Sheet complies with the requirements of Regulation No 1907/2006 - REACH

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out - see attached exposure scenario

Abbreviations and acronyms

IMDG	:	International Maritime Code for Dangerous Goods
ADR	:	European Agreement for the Carriage of Dangerous Goods by Road
RID	:	European Agreement for the Carriage of Dangerous Goods by Rail
ICAO	:	International Civil Aviation Organisation
IATA	:	International Air Transport Association
REACH	:	Registration, Evaluation, Authorisation and Restriction of Chemicals
CLP	:	Classification, Labelling and Packaging
CAS	:	Chemical Abstracts Service
vPvB	:	Very persistent and very Bioaccumulative

Disclaimer

The information provided in this safety data sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any proceed, unless specified in the text.